## Before the FEDERAL COMMUNICATIONS COMMISSIFIFILE COPY ORIGINAL Washington, DC 20554

In the Matter of		URIGINAL	
The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band	)		RECEIVED
TO: The Commission			L COMMUNICATIONS COMMISSION

## COMMENTS OF PEGASUS DEVELOPMENT CORPORATION

Pegasus Development Corporation ("Pegasus") hereby comments on the Commission's Notice of Proposed Rulemaking in the above-captioned proceeding. Pegasus urges the Commission to reverse its tentative decision permitting Celsat America, Inc.'s ("Celsat") to use primary GSO FSS spectrum in the Ka-band for GSO MSS feeder links in the CONUS arc. Celsat's proposed operations would be a highly inefficient use of the Ka-band orbital resource. The Commission should preclude such operations and instead authorize Celsat to share spectrum in other available frequency bands.

## **Background**

*Pegasus*. On December 22, 1997, Pegasus applied for authority to launch and operate a global geostationary ("GSO") Fixed-Satellite Service ("FSS") system in the Ka-band.<sup>2/</sup> This application was filed in the second Ka-band application processing round for GSO FSS systems. With its system, Pegasus plans to provide to residential consumers and businesses a broad range

Notice of Proposed Rulemaking, Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, 1999 FCC LEXIS 1217, IB Docket No. 99-81; RM-9328 (March 25, 1999) ("2 GHz NPRM").

Application of Pegasus Development Corporation, FCC File Nos. SAT-LOA-19980403-00025-29 (December 22, 1997). Pegasus' parent corporation, Pegasus Communications Corporation, is a provider of Direct Broadcast Satellite, television broadcasting, and cable services, and is one of the fastest growing media companies in the United States.

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of ubiquitous multimedia services, consisting primarily of wide-band, high-speed data transmissions.

Pegasus' application is one of thirteen filed by GSO FSS applicants in the second round process. There is a shortage of full-CONUS orbital locations in the second-round Ka-band proceeding, with applicants' demands in the full-CONUS are exceeding the supply of such orbital locations. While the second-round applicants have conducted negotiations regarding orbital assignments, there has been no resolution of this mutual exclusivity in the CONUS arc.

Celsat's Proposed Feeder Links. Celsat is an applicant for a GSO Mobile Satellite

Service ("MSS") system in the 2 GHz processing round. In the second Ka-band processing

round, Celsat filed an amendment to its 2 GHz application proposing to operate GSO MSS feeder

links over 850 MHz of spectrum in the CONUS arc in the Ka-band, at 17.7-18.55 GHz

(downlink) and 27.5-28.35 GHz (uplink). On May 21, 1999, Pegasus petitioned to deny

Celsat's Ka-band feeder link proposal. In its response, Celsat now clarifies that it intends to

operate its feeder links in primary GSO FSS spectrum in the Ka-band, and that for such

operations it seeks exclusive use of a Ka-band orbital location in the full-CONUS arc. In the full-CONUS arc.

The 2 GHz NPRM. In the Commission's Notice of Proposed Rulemaking in this proceeding ("2 GHz NPRM"), the Commission tentatively concluded that GSO FSS spectrum in the Ka-band is appropriate spectrum in which to accommodate Celsat's CONUS feeder link request. 2 GHz NPRM at para. 64. In support of this decision, the Commission stated that much

Application of Celsat America, Inc., FCC File No. SAT-AMD-19980123-00009 (September 25, 1997).

Consolidated Petition to Deny, Pegasus Development Corporation, at 15-18 (May 21, 1999).

See Consolidated Reply and Opposition to Petitions to Deny or Defer of Celsat American, Inc., FCC File No. SAT-AMD-19980123-00009 (June 11, 1999).

of Celsat's requested spectrum falls within secondary GSO FSS designations, and that the Kaband is currently not used by domestic fixed satellites. At the same time, the Commission noted that Ka-band GSO FSS frequencies at many orbital locations in the CONUS arc are already assigned, and that it may be very difficult for Celsat to obtain its requested 850 MHz of requested spectrum. *Id.* Accordingly, the Commission asked if its policy prohibiting feeder link use of the conventional C- and Ku-band allocations within the domestic arc should also be applied to Kaband GSO feeder link requests.

## Discussion

I. The Commission Should Reverse Its Tentative Conclusion and Preclude Celsat from Operating GSO MSS Feeder Links in Primary GSO FSS Spectrum in the Crowded CONUS Arc

The Commission should reverse its tentative conclusion in the 2 GHz NPRM and preclude Celsat from operating its proposed GSO MSS feeder links in primary Ka-band GSO FSS spectrum in the CONUS arc. Celsat's proposed operation of feeder links in the CONUS arc would be a highly inefficient use of scarce Ka-band GSO FSS orbital resources. While Celsat proposes to use a full-CONUS orbital location to provide feeder link service to a limited number of earth stations, Pegasus and the other second-round Ka-band GSO FSS applicants would use a full-CONUS orbital location to provide ubiquitous services to residential consumers and businesses anywhere in the United States. As noted in the 2 GHz NPRM, the Commission has previously precluded use of the FSS C- and Ku-bands for MSS feeder links in the domestic orbital arc on the basis that such operations would reduce the amount of spectrum available for conventional FSS.<sup>56</sup> With CONUS use of the GSO FSS bands likely becoming substantial in the

See 2 GHz NPRM at para. 52; Memorandum Opinion, Order and Authorization, Notice of Proposed Rulemaking, Amendment of Parts 2, 22, and 25, of the Commission's Rules to Allocate Spectrum for and to Establish Other Rules and Policies Pertaining to the Use of

next five to ten years, the Commission should now extend this policy to the Ka-band.

Given that Celsat should be able to share spectrum with licensees in other frequency bands, <sup>7/2</sup> there is no reason for the Commission to grant Celsat exclusive access to a full-CONUS orbital location in Ka-band GSO FSS spectrum. <sup>8/2</sup> Celsat already proposes in its application to operate its feeder uplinks in Ka-band frequencies allocated to LMDS, <sup>9/2</sup> and Pegasus sees no reason why Celsat cannot operate its feeder downlinks in the Ka-band in primary FS spectrum. <sup>10/2</sup> Alternatively, Celsat could operate its feeder downlink in the Ku-band outside the conventional

Radio Frequencies in a Land Mobile Satellite Service for the Provision of Various Common Carrier Services, GEN Docket No. 84-1234, 4 FCC Rcd 6041, 6050 (1989).

Celsat itself indicates in its Ka-band filing that it "can operate its system using a wide range of alternative feeder links." Celsat Amendment to Application, Supplement to Appendix H, AP4-3K-A2. Celsat has not made clear, however, whether it could operate its proposed MSS system, including its feeder links, from an orbital location outside the full CONUS arc. Due to the shortage of full-CONUS orbital locations in the second-round Ka-band application proceeding, however, orbital locations that offer partial CONUS coverage are also likely to be useful and important to second-round Ka-band applicants, and Pegasus therefore believes that partial CONUS orbital locations in Ka-band GSO FSS spectrum should only be assigned to GSO FSS systems providing ubiquitous service to end-users.

Pegasus also believes that Celsat's feeder links will require only a small fraction of the 850 MHz that it has requested if it does not obtain all of the 2 GHz spectrum that it is seeking in the 2 GHz proceeding.

<sup>&</sup>lt;sup>2</sup> Celsat Amendment to Application, Supplement to Appendix H, AP4-2K-A2.

In fact, even if the Commission permits Celsat to operate in Ka-band GSO FSS spectrum, Celsat will still have to operate in other spectrum on a shared basis. Celsat indicates that it needs 850 MHz for its feeder link operations, but the Commission's current uplink and downlink band plans allocate only 750 MHz of primary spectrum to GSO FSS. *See* Notice of Proposed Rulemaking, Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use, IB Docket No. 98-172 (September 18, 1998).

Ku-band GSO FSS allocation, as proposed by TMI in its 2 GHz application. 11/

A decision to permit Celsat to share Ka-band spectrum with LMDS and FS operators or operate its feeder links outside the Ka-band would greatly benefit both Celsat and the applicants in the second GSO FSS Ka-band processing round. By operating in the Ka-band outside primary GSO FSS spectrum, Celsat would have much greater flexibility in the selection of an orbital location. In addition, such a decision by the Commission would help to alleviate the mutual exclusivity in the second Ka-band processing round, where the demand for full-CONUS orbital locations currently exceeds the supply of such slots by a significant margin.

For the aforementioned reasons, Pegasus urges the Commission to take the actions described in these Comments.

Respectfully submitted,

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See 2 GHz NPRM at paras. 58, 61. Celsat is the only GSO MSS applicant in the 2 GHz proceeding to propose feeder links in the Ka-band. *Id.* at para. 64.